

FIG.1

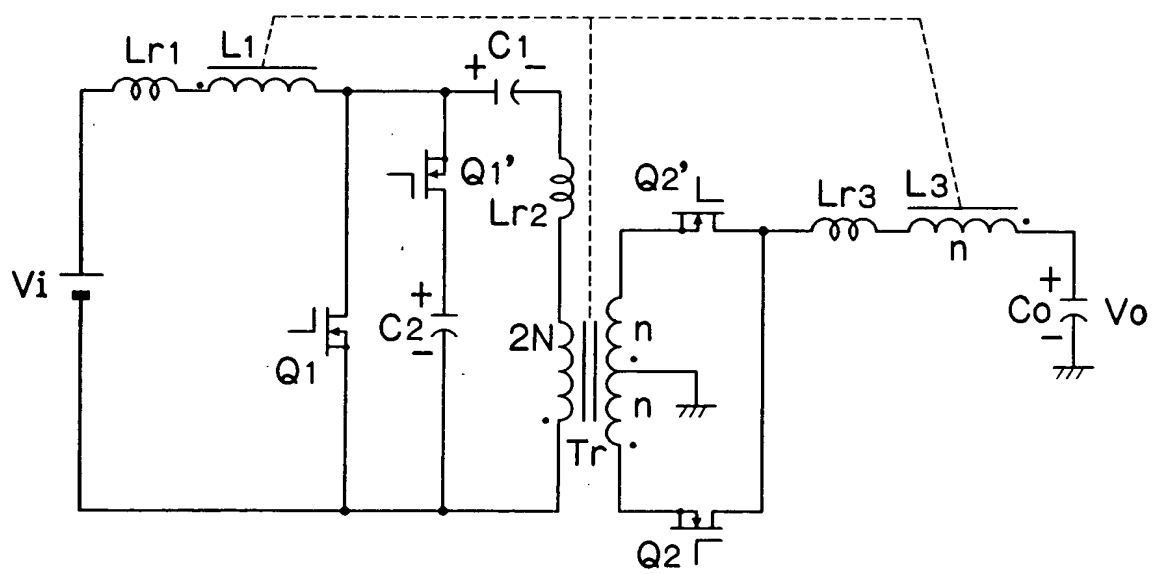


FIG.2

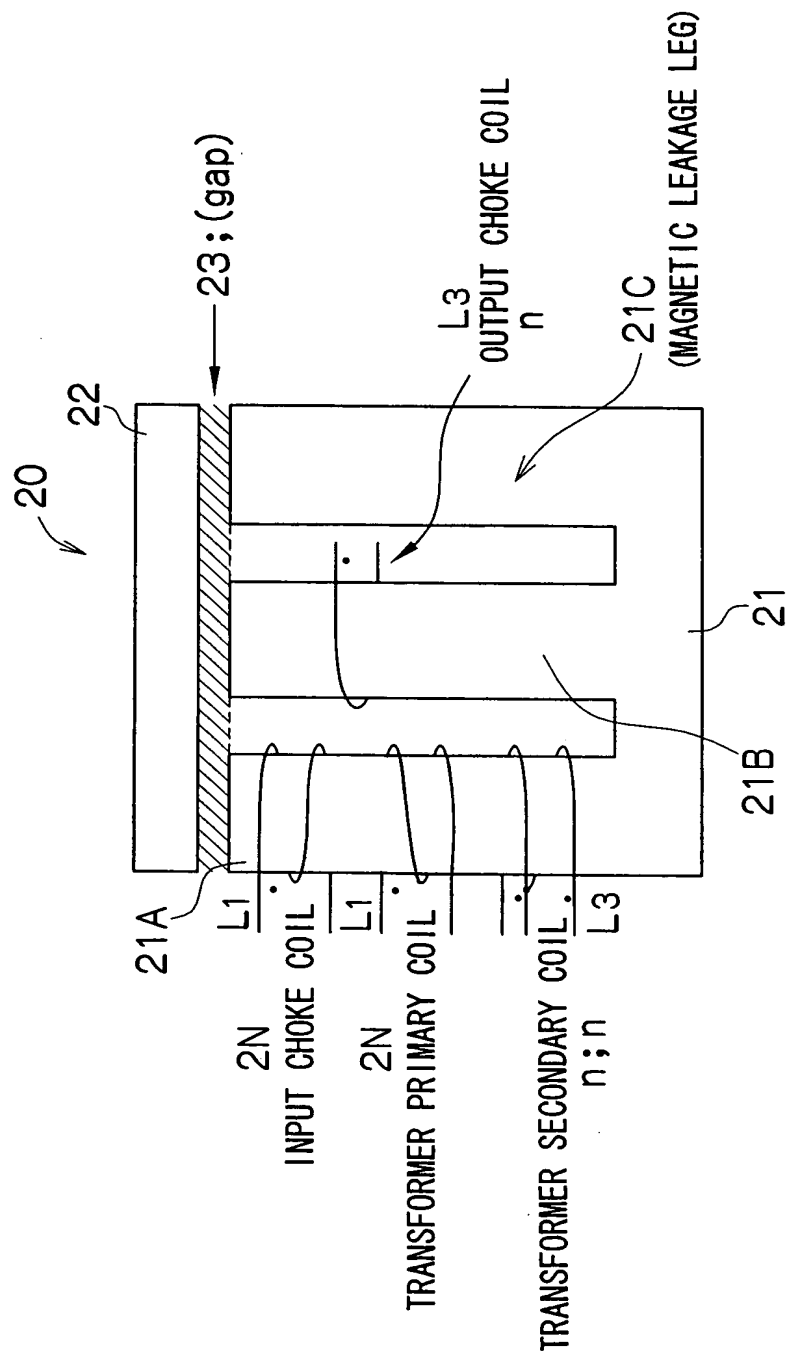


FIG.3

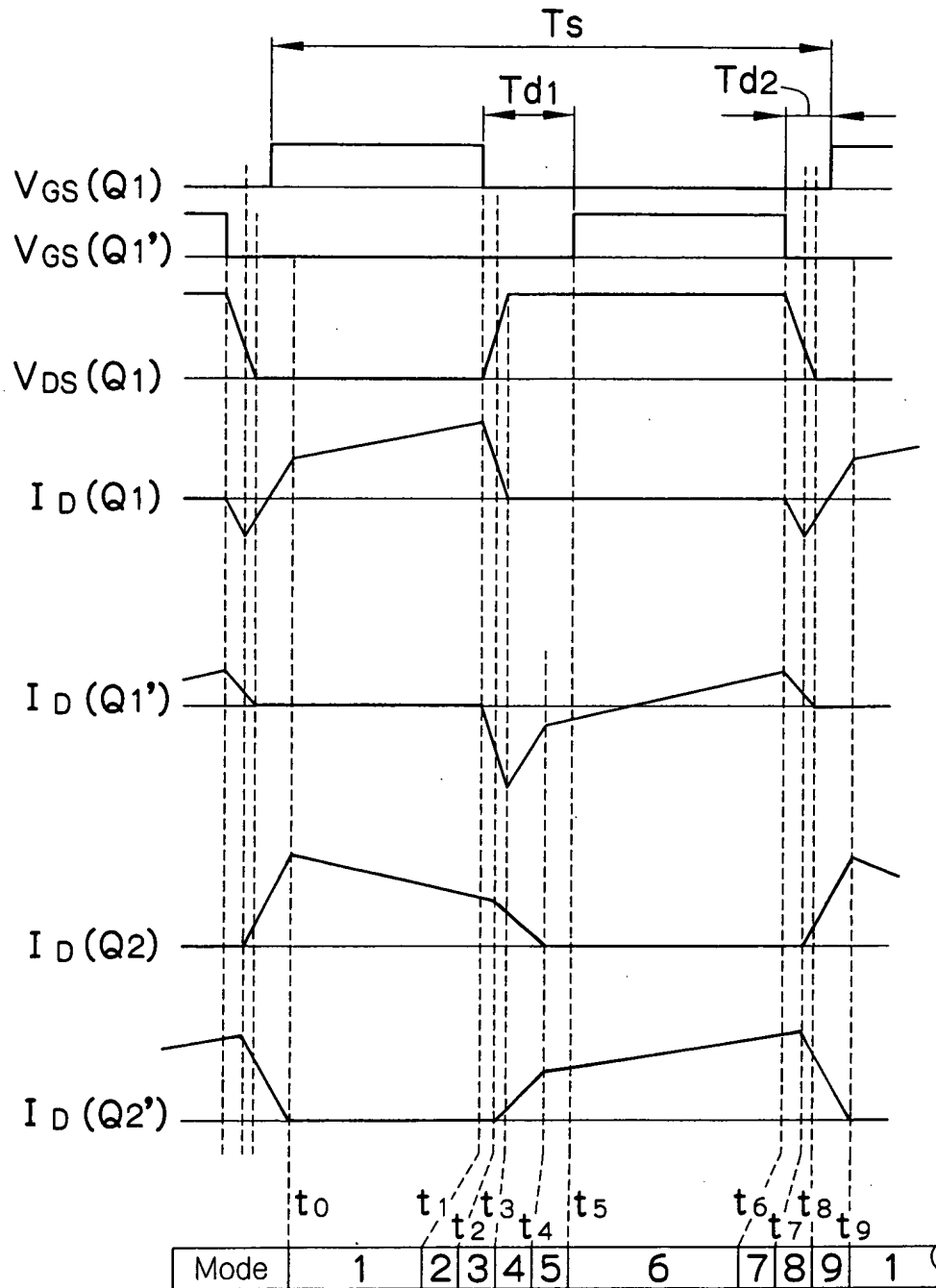


FIG.4

MODE 1

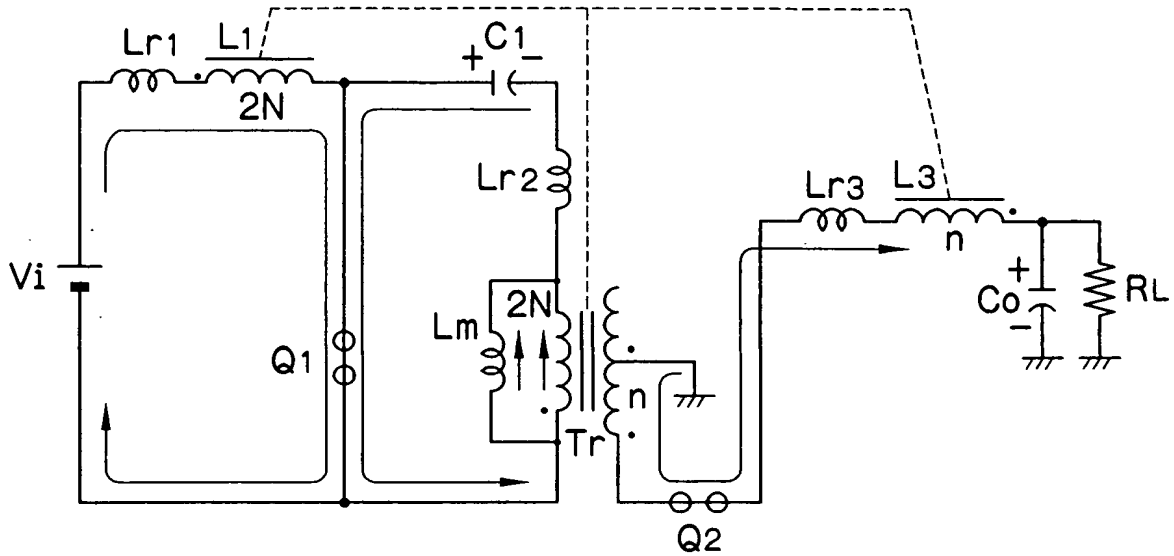


FIG.5

MODE 2

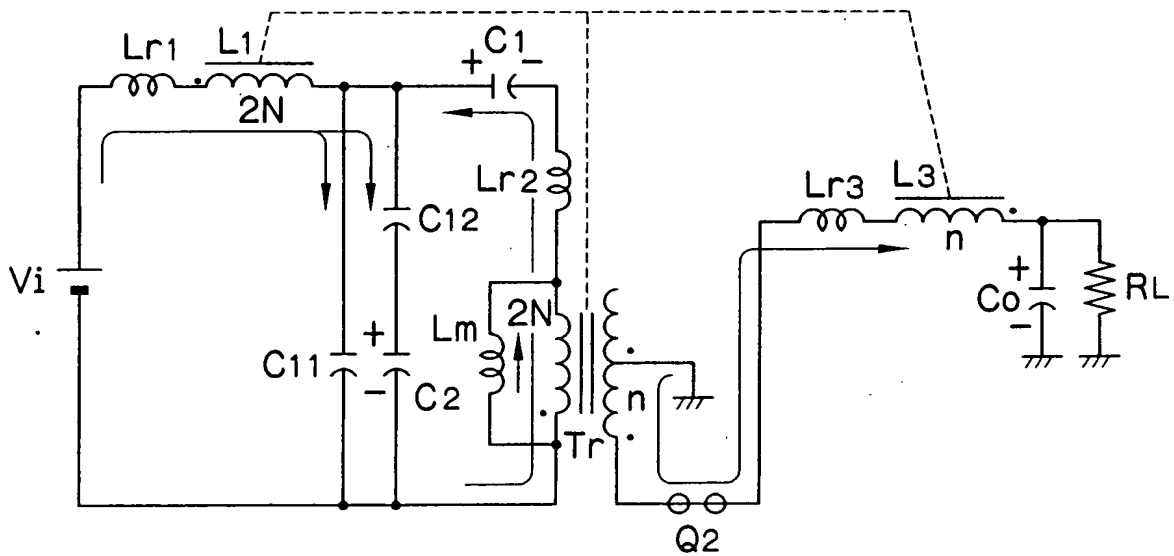


FIG.6

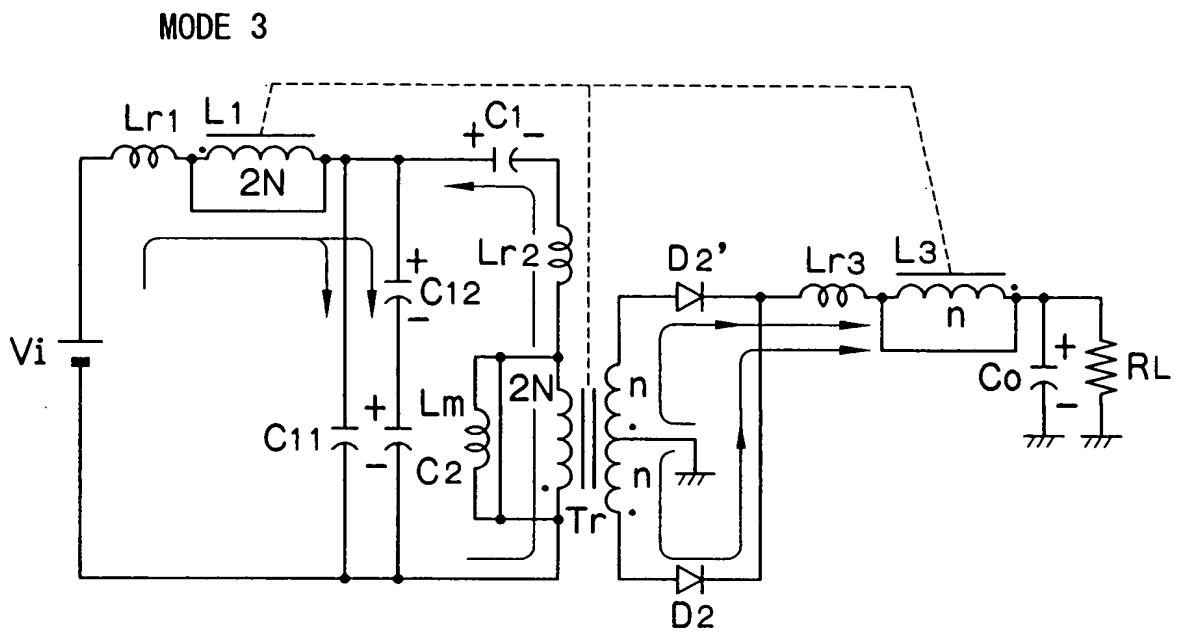


FIG.7

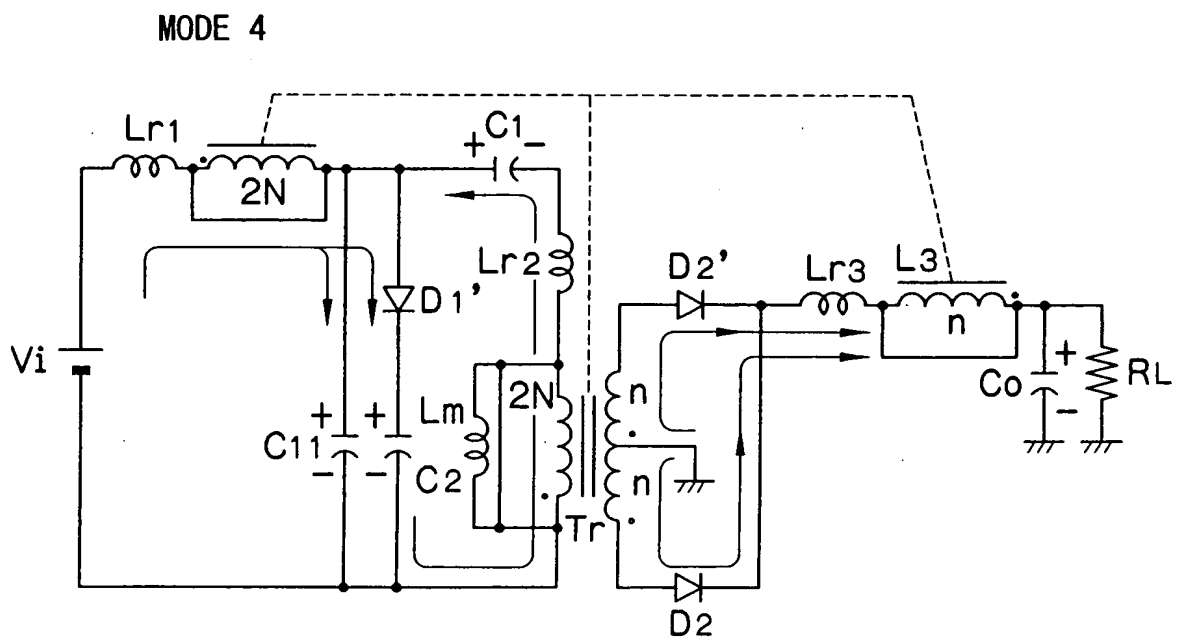


FIG.8

MODE 5

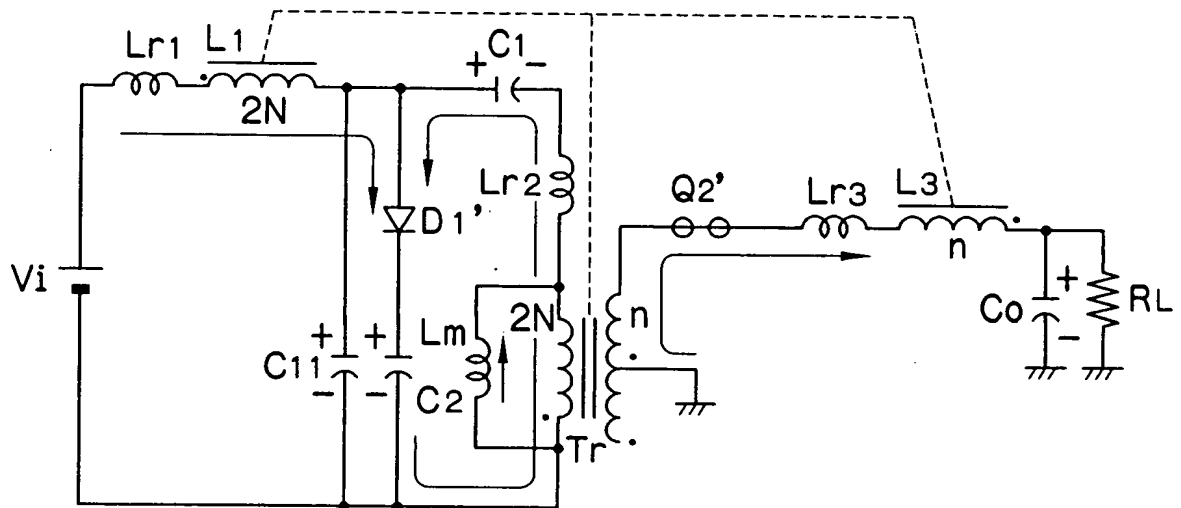
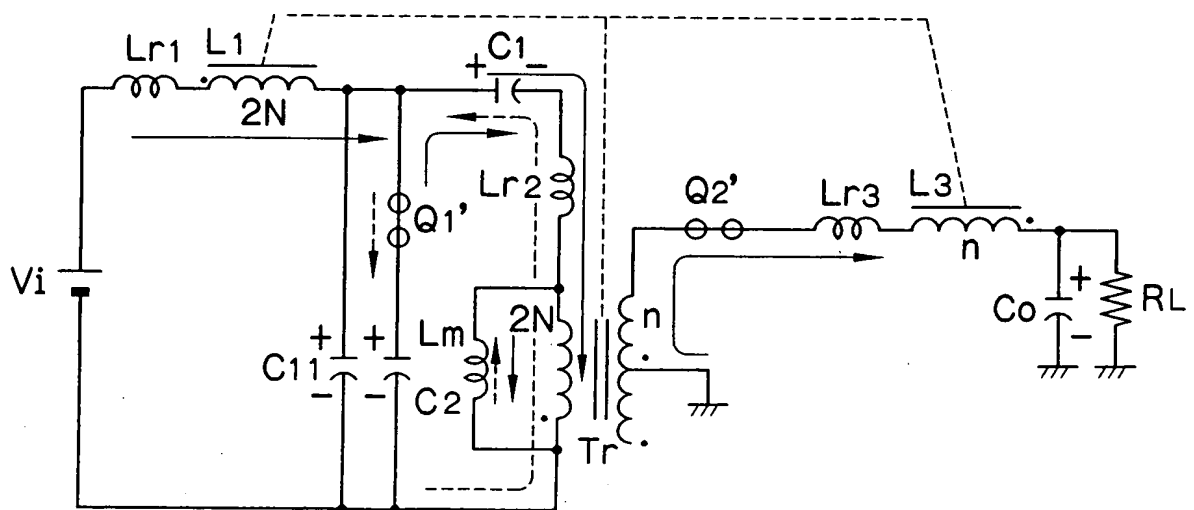


FIG.9

MODE 6



MODE 7



MODE 8

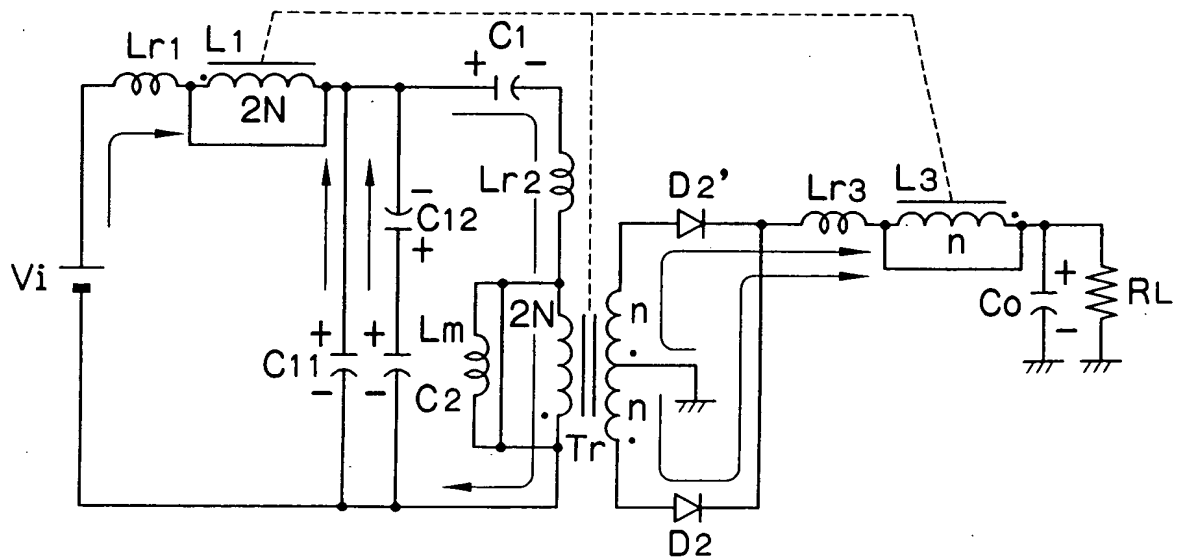


FIG.12

MODE 9

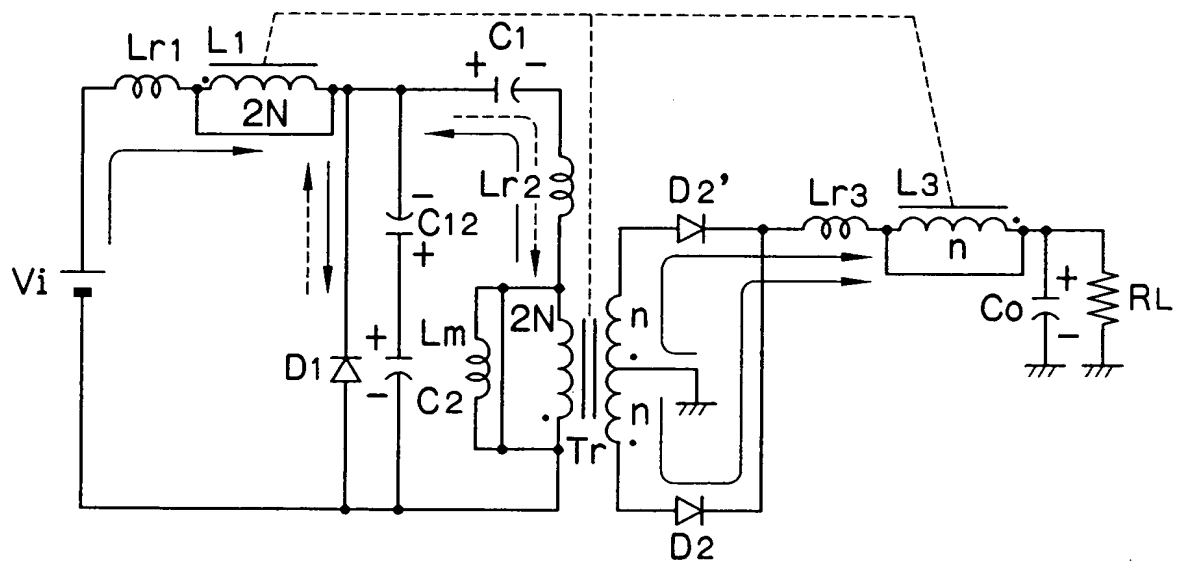


FIG.13

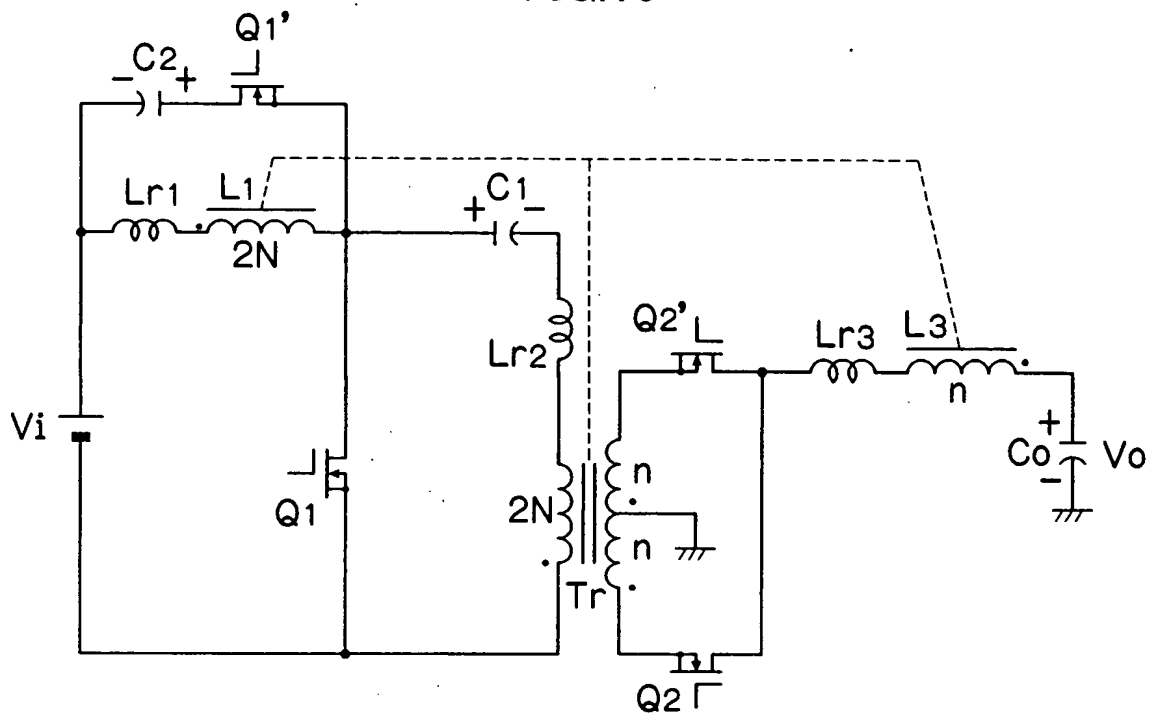


FIG.14

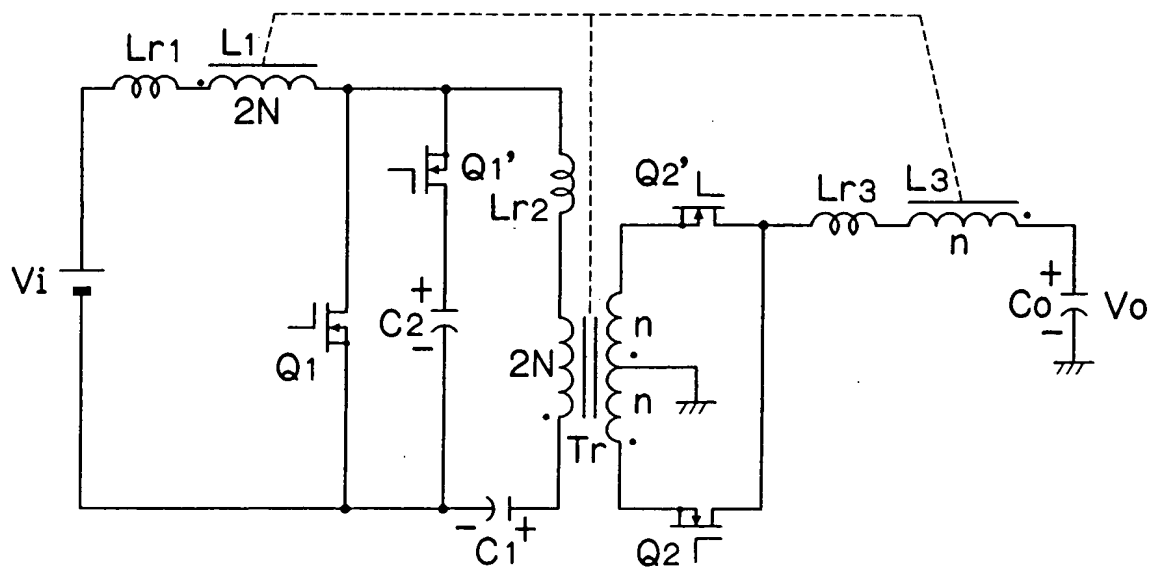


FIG.15

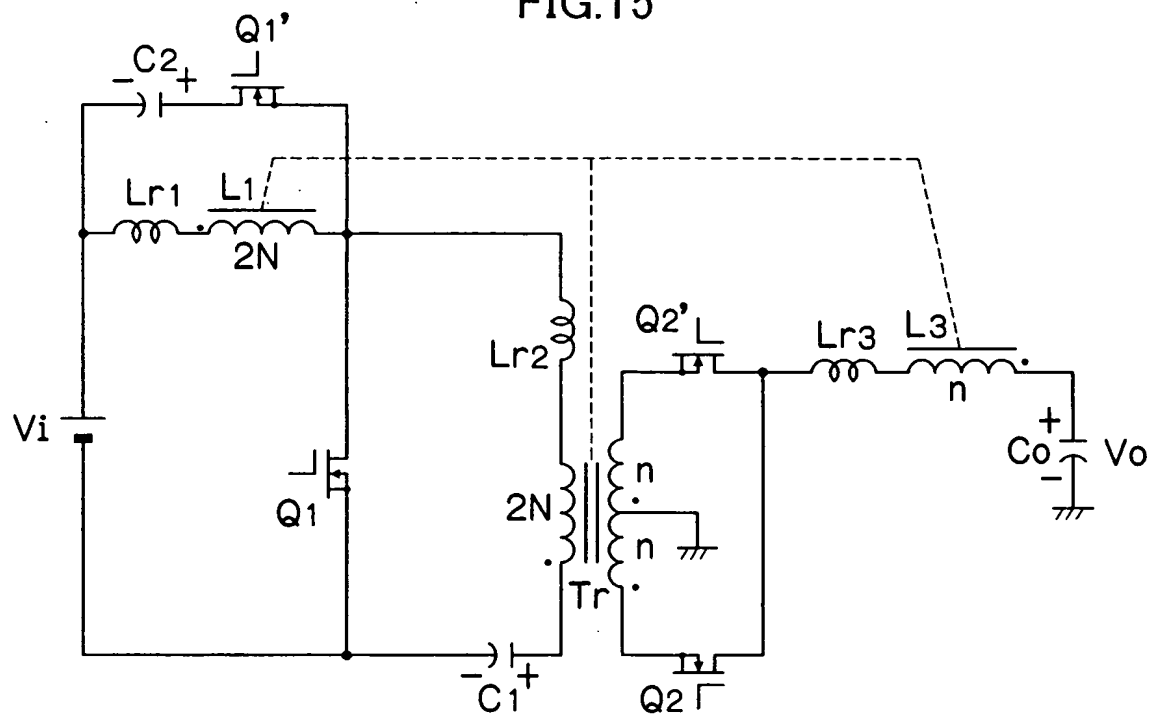


FIG.16

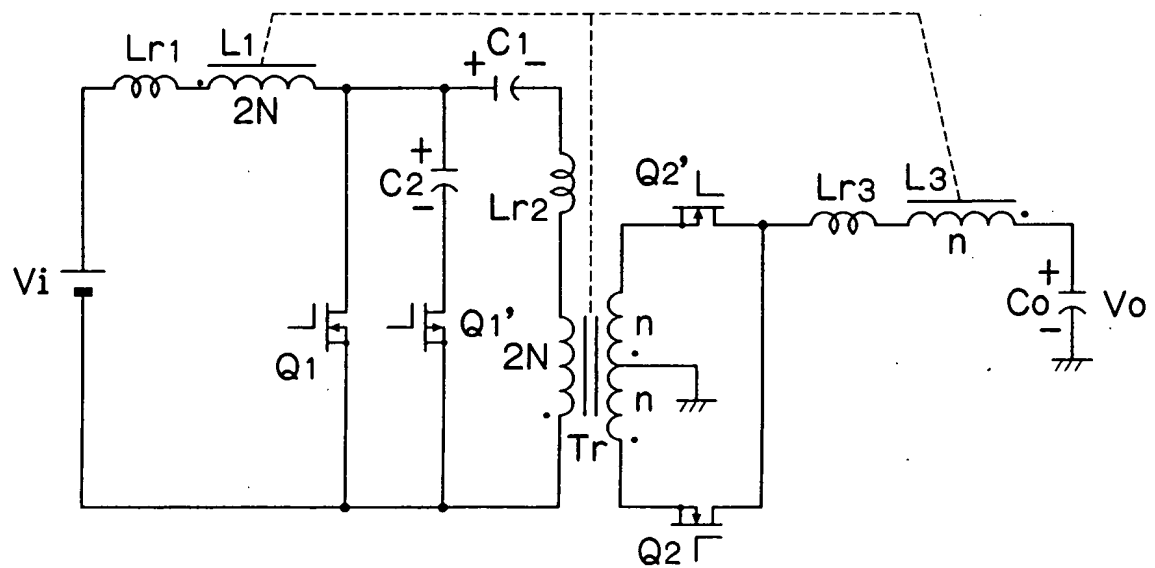


FIG.17

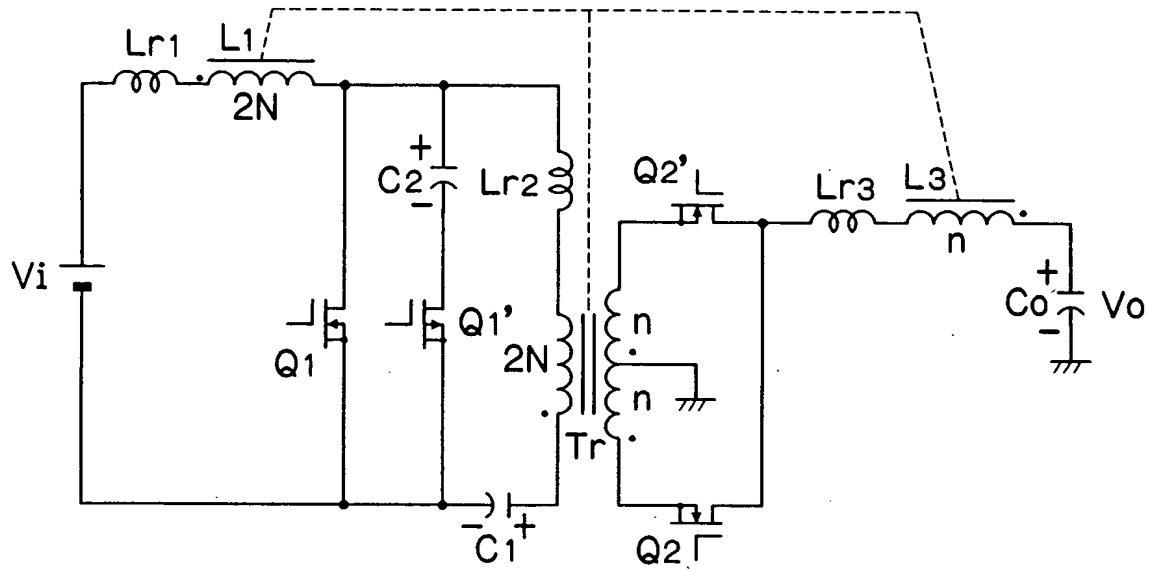


FIG.18

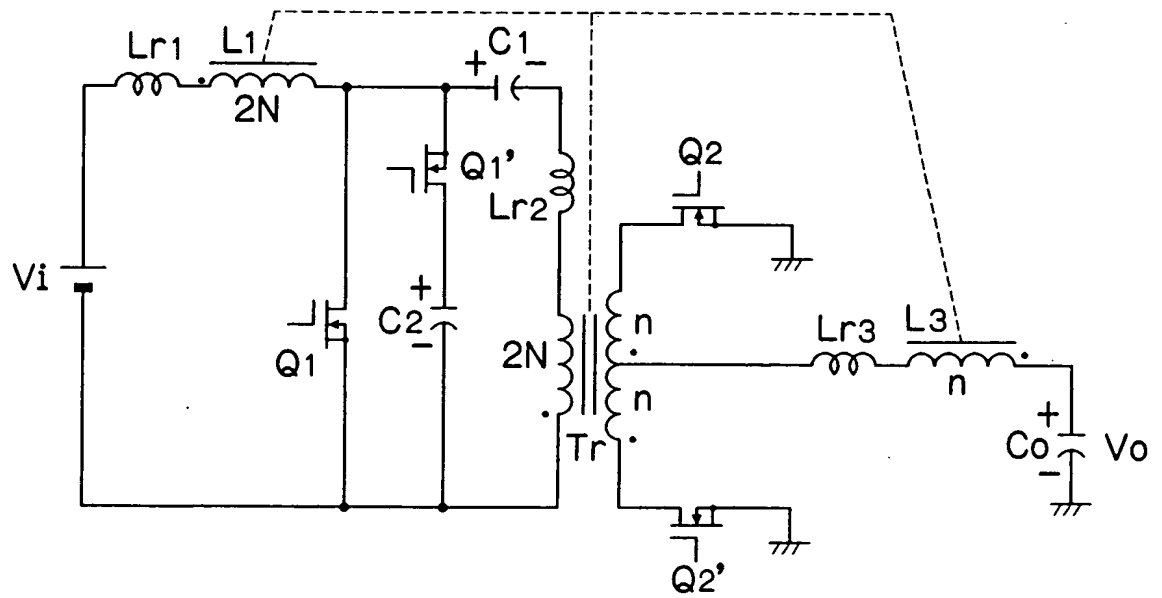


FIG.19

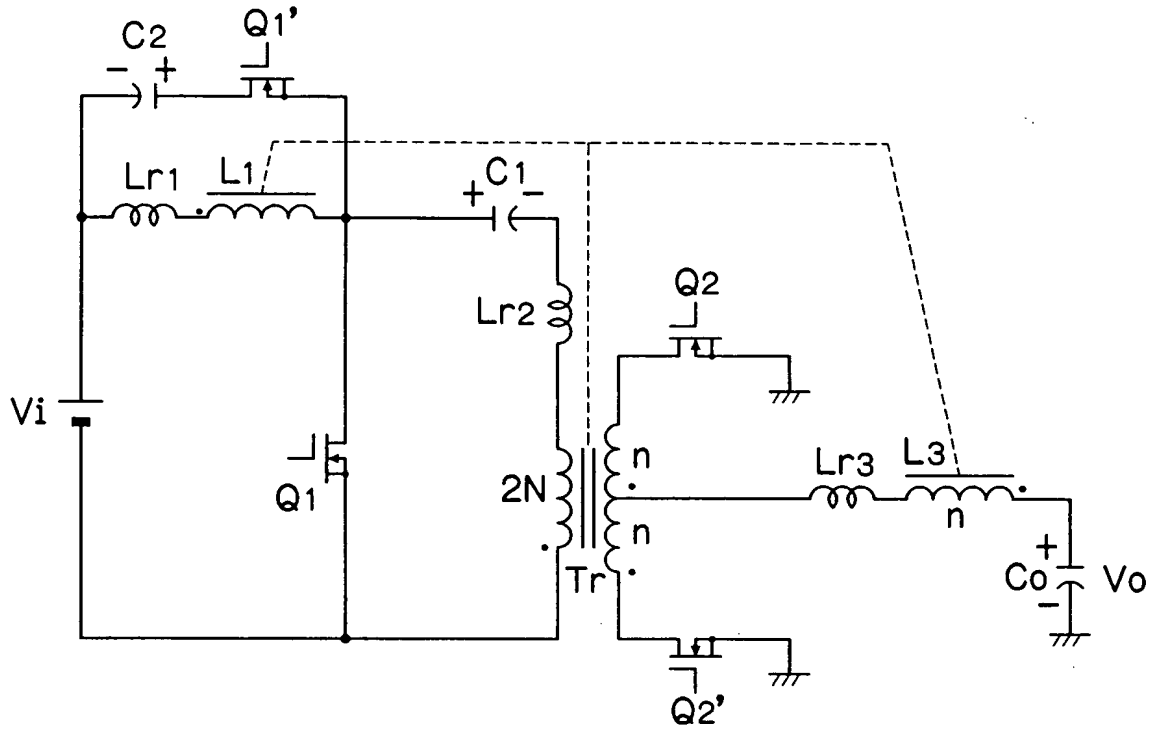
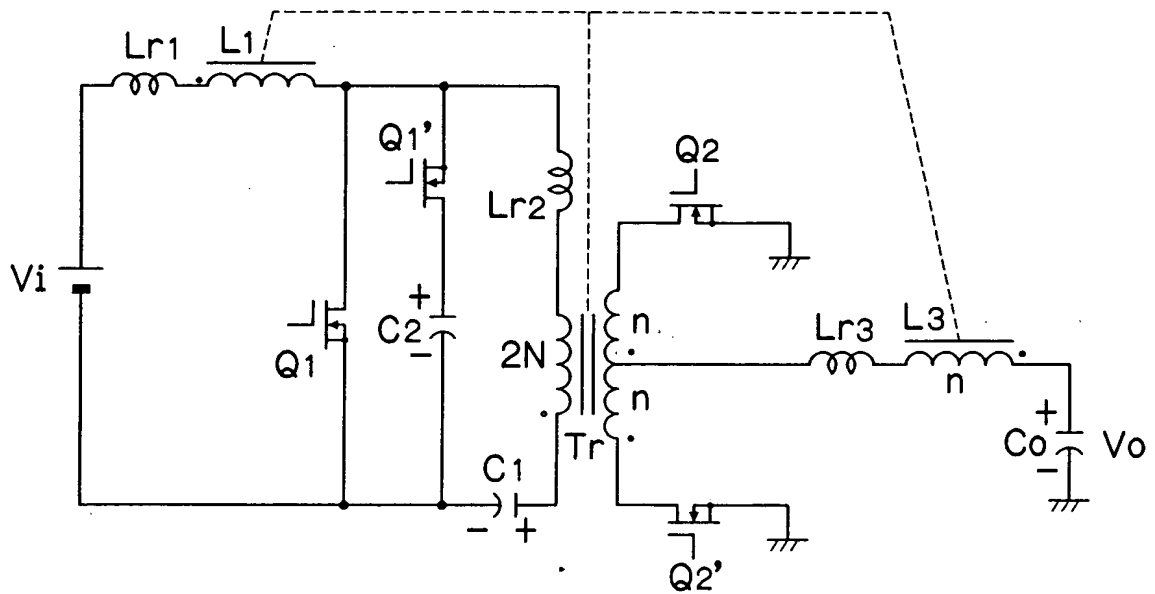


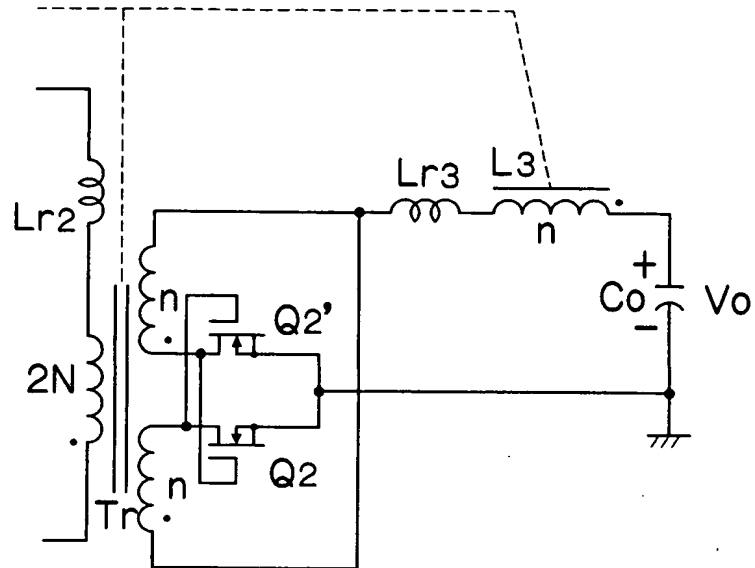
FIG.20



The circuit diagram shows a full-bridge inverter. The input DC voltage V_i is connected to a bridge consisting of four MOSFETs: $Q1$ and $Q1'$ on the left leg, and $Q2$ and $Q2'$ on the right leg. Each MOSFET has an anti-parallel capacitor ($C1, C2$ for the left leg, $C3, C4$ for the right leg). The bridge output is connected to a transformer Tr with primary inductance $Lr1$ and secondary inductance $Lr2$. The transformer has a turns ratio of $2N:n$. The secondary is connected to a second-stage filter consisting of an inductor $L3$ and a capacitor $C5$ in parallel, which produces the output voltage V_o . A dashed line indicates a connection from the transformer secondary to the input of the second-stage filter.

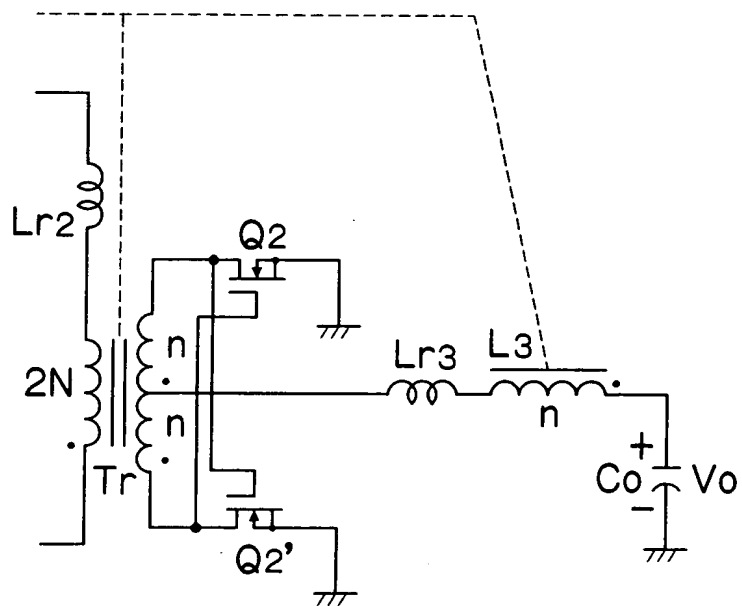
Tr PRIMARY CIRCUIT IS OMITTED

FIG.25



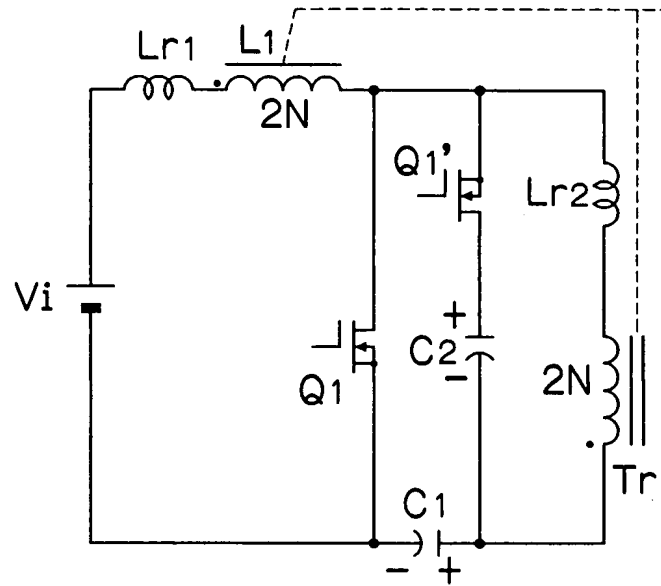
Tr PRIMARY CIRCUIT IS OMITTED

FIG.26



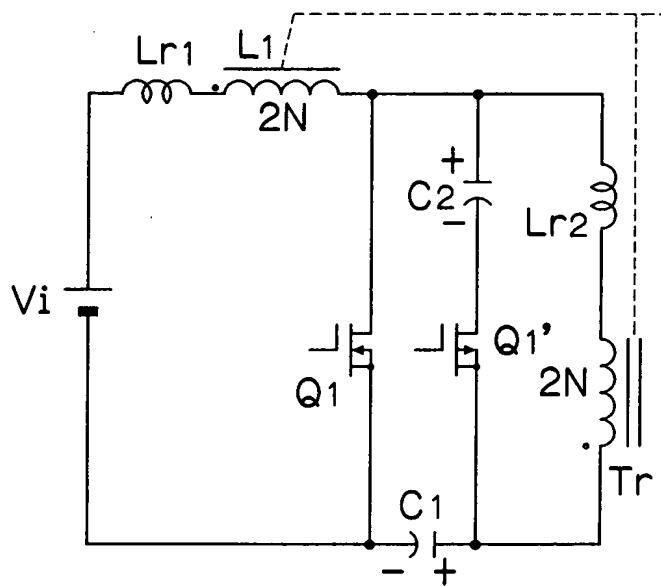
Tr PRIMARY CIRCUIT IS OMITTED

FIG.27



Tr SECONDARY CIRCUIT IS OMITTED

FIG.28



Tr SECONDARY CIRCUIT IS OMITTED

FIG.29
PRIOR ART

